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A NEW SUBSPECIES OF VARYING LEMMING, *DICROSTONYX TORQUATUS* (PALLAS), FROM YUKON TERRITORY (MAMMALIA, RODENTIA)

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In 1961 G. D. Tessier and I collected seven varying lemmings from the Ogilvie Mountains, Yukon Territory (Youngman, 1964: 4) thus providing a southernmost record of occurrence for Yukon Territory, western Mackenzie District and eastern Alaska. Subsequent collecting in 1963 and 1964 has added an additional three specimens. The comparison of these specimens with over two thousand specimens from numerous localities from Alaska and Canada gives basis for the recognition of a new subspecies which may be known as:

Dicrostonyx torquatus nunatakensis new subspecies

Dicrostonyx torquatus, Youngman, Nat. Mus. Canada, Nat. Hist. Papers 23, p. 4, 1964.

Holotype: Young adult female in summer pelage, skin and skull, National Museum of Canada no. 29503; from Yukon Territory: 20 mi. S Chapman Lake (lat. 64°35′, long. 138°13′), 5500 ft; collected by Phillip M. Youngman, 18 August 1961, original number 554.

Paratypes: Nine specimens, Yukon Territory: 20 mi. S Chapman Lake (lat. 64°38′, long. 138°13′) 5500 ft, 8 (NMC 29499–29502, 29504–05, 33426–27; Ogilvie Mountains, 52 mi. NE Dawson and 14 mi. S Lomand Lake, 5400 ft, 1 (NMC 31337).

Etymology: Greenland eskimo *nunatak*, a peak appearing above a glacier.

Distribution: Known only from the type-locality and an adjacent peak in the Ogilvie Mountains of north-central Yukon Territory.

Distinctive characters: Overall impression of dorsum of adult pelage (capitalized color terms after Munsell, 1954): Dark Gray Brown (10YR 5/2) with thin, dark mid-dorsal stripe. Auricular patches Yellowish Red (5YR 5/6). Venter Pinkish Gray (5YR 7/2). Hairs of underfur of dorsum basally Dark Gray (10YR 4/0), wide subapical band Light Gray (5YR 7/1) proximally, darkening and strengthening to

Yellowish Red (5YR 5/4) and narrowly tipped with black. Guard hairs basally Dark Gray (10YR 4/0) with wide black tip.

Measurements (in mm): External measurements of the holotype, followed by those of a young adult male (NMC 29504), are: total length, 129, 128; tail length, 12, 11; hind foot length, 16, 17; ear length from notch, 4, —. Cranial measurements of the same specimens are: condylobasilar length, 25.3, —; length of nasal bones, 6.6, 7.8; breadth of nasal bones, 3.2, 3.5; zygomatic breadth, 16.6, 17.9; lambdoidal breadth, 12.4, —; least interorbital constriction, 3.7, —; alveolar length of upper maxillary tooth-row, 6.5, 6.8.

Comparisons: *Dicrostonyx torquatus nunatakensis* Youngman differs markedly from *D. t. rubricatus* (Richardson) and *D. t. kilangmiutak* Anderson and Rand in being overall gray brown dorsally rather than having the dorsum washed with dark red anteriorly, with a gray rump, and in having the venter paler. Specimens in immature pelage are grayer and less yellow than comparable specimens of *D. t. rubricatus* and *D. t. kilangmiutak*. From *D. t. richardsoni* Merriam, *D. t. nunatakensis* differs in being gray brown rather than reddish brown and in being much paler.

Remarks: The zygomatic breadth, lambdoidal breadth and alveolar length of upper maxillary tooth-row of *D. t. nunatakensis* are smaller than specimens of comparable age of *D. t. rubricatus* from Griffin Point, Alaska and *D. t. kilangmiutak* from Banks and Victoria Islands, Northwest Territories, however, adequate statistical comparison between the new subspecies and adjacent subspecies cannot be made owing to the lack of sufficient adult or subadult specimens of the new subspecies. The color difference between the subspecies is, however, especially well marked. *Dicrostonyx torquatus nunatakensis* is found in rocky alpine tundra, at the base of a glacial cirque, high in the rugged Southern Ogilvie Range of the Ogilvie Mountains, approximately 250 miles from the nearest recorded specimens from Fort Yukon, Alaska and Richardson Mountains, Northwest Territories. The population density of the new subspecies was highest in 1961 when 450 trap-nights produced seven specimens. In 1963, 510 trap-nights produced only one specimen, and in 1964, 150 trap-nights produced two specimens. It is possible that the species never reaches great density in this rocky alpine habitat. The absence of old adults in the collection also points to the possibility that the harsh environment with its three month growing season rarely permits the survival of older animals. Studies by Vernon and Hughes (1966) indicate that the newly named subspecies probably represents a relict population that became isolated on nunataks above valley glaciers well over 10,000 years ago.

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